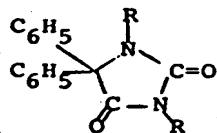
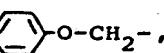
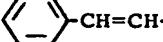


WHAT WE CLAIM

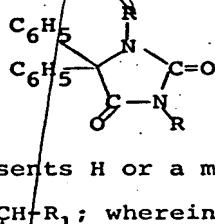
Indep. 1. A compound having the formula:



- wherein R represents H or a member selected from the group
 5 consisting of $-\text{CH}-\text{R}_1$; wherein R_1 represents a member selected
 $\text{X}-\text{R}_2$
- from the group consisting of H, $\text{C}_1\text{-C}_7$ straight or branched
 alkyl, CCl_3 , CBr_3 , Cl_3 , , $(\text{CH}_3)_2\text{NCH}_2-$, $-\text{CHO}$, ,
- , , , or ; wherein R_3 represents
 a member selected from the group consisting of $-\text{OH}$, halogen,
 10 $-\text{OCH}_3$, $-\text{COOCH}_3$, $-\text{NO}_2$ or $-\text{OCOCH}_3$; wherein X is $-\text{O}-$, $-\text{S}-$,
 R_1 or $-\text{N}-$; and wherein R_2 represents a member selected
 from the group consisting of $-\text{P}-\text{OH}$ or $-\text{C}(\text{OH})-\text{R}_4$, wherein R_4 is a
 member selected from the group consisting of 
 wherein R_3 is defined as above, , , 
- 15 the residue of any naturally occurring protein amino acid,
 the residue of any N- substituted amino acid, wherein said
 substituent is any amino acid protective group cleavable via
 hydrogenolysis or hydrolysis or the residue of an $\text{N},\text{N}-\text{C}_1\text{-C}_5$ -
 dialkyl or $\text{C}_4\text{-C}_7$ cycloalkylamino acid, or wherein R_4 is a
 20 member selected from the group consisting of $-(\text{CH}_2)_n\text{COH}$,
 $-\text{CH}_2\text{OCH}_2\text{COH}$, $-(\text{CH}_2)_n\text{COCH}_3$, $-(\text{CH}_2)_n-\text{C}(\text{OH})-\text{OC}_2\text{H}_5$, or $-(\text{CH}_2)_n-\text{C}(\text{OH})-\text{N}(\text{R}_5)-\text{R}_6$,
 wherein n represents an integer of from 1-5 and R_5 and R_6
 which may be the same or different represent $\text{C}_1\text{-C}_5$ alkyl or
 together form a heterocyclic ring with the N atom to which
 25 they are attached, or wherein R_4 is a member selected from the
 group consisting of imidazolyl, $-\text{O}-\text{C}_1\text{-C}_8$ alkyl, $-\text{O}-\text{benzyl}$,
 $-\text{O}-\text{phenyl}$, and $-\text{O}-(\text{CH}_2)_n\text{N}(\text{R}_5)-\text{R}_6$, wherein n , R_5 and R_6 are defined

as above; with the proviso that R in both occurrences cannot represent H simultaneously; or the pharmaceutically acceptable acid addition or basic salts, C₁-C₄ alkylhalide quaternary salts or N-oxide thereof;

- 5 2. The compound of claim 1:
 3-Hydroxymethyldiphenylhydantoin.
- 10 3. The compound of claim 1:
 3-N,N-Dimethylglycyloxymethyldiphenylhydantoin.
- 15 4. The compound of claim 1:
 3-N,N-Dimethylglycyloxymethyldiphenylhydantoin methanesulfonate.
- 20 5. The compound of claim 1:
 3-N,N-Dimethylglycyloxymethyldiphenylhydantoin salicylate.
- 25 6. The compound of claim 1:
 3-Glutarylloxymethyldiphenylhydantoin.
- 30 7. The compound of claim 1:
 3-Succinylloxymethyldiphenylhydantoin.
- 35 8. A pharmaceutical composition comprising an effective anticonvulsant antiepileptic or antiarrhythmic amount of a compound having the formula:



wherein R represents H or a member selected from the group consisting of -CH₂R₁; wherein R₁ represents a member selected from R₂

25 from the group consisting of H, C₁-C₇ straight or branched alkyl, CCl₃, CBr₃, Cl₃, , (CH₃)₂NCH₂⁻, -CHO, ,

30 , , , or ; wherein R₃ represents

a member selected from the group consisting of -OH, halogen, -OCH₃, -COOCH₃, -NO₂ or -OCOCH₃; wherein X is -O-, -S-,

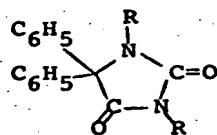
35 or -N⁺R₁; and wherein R₂ represents a member selected

from the group consisting of $\text{--}\overset{\text{O}}{\underset{\text{OH}}{\text{P}}} \text{-OH}$ or $\text{--}\overset{\text{O}}{\underset{\text{R}_4}{\text{C}}}\text{-H}_4$, wherein R_4 is a member selected from the group consisting of  R_3 , wherein R_3 is defined as above,   

the residue of any naturally occurring protein amino acid, 5 the residue of any N- substituted amino acid, wherein said substituent is any amino acid protective group cleavable via hydrogenolysis or hydrolysis or the residue of an $\text{N},\text{N-C}_1\text{-C}_5$ - dialkyl or $\text{C}_4\text{-C}_7$ cycloalkylamino acid, or wherein R_4 is a member selected from the group consisting of $-(\text{CH}_2)_n\overset{\text{O}}{\text{COH}}$, 10 $-\text{CH}_2\overset{\text{O}}{\text{OCH}_2}\overset{\text{O}}{\text{COH}}$, $-(\text{CH}_2)_n\overset{\text{O}}{\text{COCH}_3}$, $-(\text{CH}_2)_n\overset{\text{O}}{\text{C-OC}_2\text{H}_5}$, or $-(\text{CH}_2)_n\overset{\text{O}}{\text{C-N}}\overset{\text{R}_5}{\text{R}_6}$, wherein n represents an integer of from 1-5 and R_5 and R_6 which may be the same or different represent $\text{C}_1\text{-C}_5$ alkyl or together form a heterocyclic ring with the N atom to which they are attached, or wherein R_4 is a member selected from the 15 group consisting of imidazolyl, $-\text{O-C}_1\text{-C}_8$ alkyl, $-\text{O-benzyl}$, $-\text{O-phenyl}$, and $-\text{O-(CH}_2)_n\overset{\text{R}_5}{\text{N}}\overset{\text{R}_6}{\text{R}}$, wherein n , R_5 and R_6 are defined as above; with the proviso that R in both occurrences cannot represent H simultaneously; or the pharmaceutically acceptable acid addition or basic salts, $\text{C}_1\text{-C}_4$ alkylhalide quaternary salts or N-oxide thereof in combination with a pharmaceutically acceptable inert carrier.

9. The composition of claim 8, wherein said compound is:
3-Hydroxymethyldiphenylhydantoin.
10. The composition of claim 8, wherein said compound is:
25 3-N,N-Dimethylglycyloxymethyl)diphenylhydantoin.
11. The composition of claim 8, wherein said compound is:
3-N,N-Dimethylglycyloxymethyl)diphenylhydantoin
methanesulfonate.
12. The composition of claim 8, wherein said compound is:
30 3-N,N-Dimethylglycyloxymethyl)diphenylhydantoin
salicylate.
13. The composition of claim 8, wherein said compound:
3-Glutarylloxymethyldiphenylhydantoin.
14. The composition of claim 8, wherein said compound:
35 3-Succinylloxymethyldiphenylhydantoin.

15. A method for alleviating cardia...rythmias or convulsions in a warm-blooded animal which comprises administering thereto, an effective antiarrhythmic or anticonvulsant amount of a compound having the formula:



wherein R represents H or a member selected from the group consisting of $-\text{CH}-\text{R}_1$; wherein R_1 represents a member selected from the group consisting of H, $\text{C}_1\text{-C}_7$ straight or branched alkyl, CCl_3 , CBr_3 , Cl_3 , $\text{X}-\text{R}_2$

from the group consisting of H , $\text{C}_1\text{-C}_7$ straight or branched alkyl, CCl_3 , CBr_3 , Cl_3 , $\text{X}-\text{R}_2$, $(\text{CH}_3)_2\text{NCH}_2-$, $-\text{CHO}$, $\text{X}-\text{O}-\text{CH}_2-$,

10 $\text{X}-\text{CH}=\text{CH}-$, $\text{X}-\text{C}_6\text{H}_4-$, $\text{X}-\text{N}$, or $\text{X}-\text{O}-\text{R}_3$; wherein R_3 represents

a member selected from the group consisting of $-\text{OH}$, halogen, $-\text{OCH}_3$, $-\text{COOCH}_3$, $-\text{NO}_2$ or $-\text{OCOCH}_3$; wherein X is $-\text{O}-$, $-\text{S}-$,

15 R_1
or $-\text{N}-$; and wherein R_2 represents a member selected
from the group consisting of $-\text{OH}$ or $-\text{C}-\text{R}_4$, wherein R_4 is a
member selected from the group consisting of $\text{X}-\text{R}_3$
wherein R_3 is defined as above, $\text{X}-\text{N}$, $\text{CH}_2-\text{X}-\text{N}$, $\text{X}-\text{O}-\text{R}_3$

the residue of any naturally occurring protein amino acid,
the residue of any N- substituted amino acid, wherein said
substituent is any amino acid protective group cleavable via
hydrogenolysis or hydrolysis or the residue of an $\text{N},\text{N}-\text{C}_1\text{-C}_5$ -
dialkyl or $\text{C}_4\text{-C}_7$ cycloalkylamino acid, or wherein R_4 is a

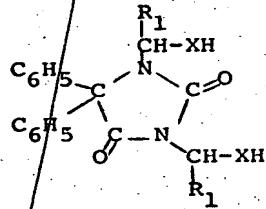
20 member selected from the group consisting of $-(\text{CH}_2)_n\text{COH}$,
 $-\text{CH}_2\text{OCH}_2\text{COH}$, $-(\text{CH}_2)_n\text{COCH}_3$, $-(\text{CH}_2)_n\text{C}(=\text{O})\text{OC}_2\text{H}_5$, or $-(\text{CH}_2)_n\text{C}(=\text{O})\text{N}-\text{R}_5-\text{R}_6$,
wherein n represents an integer of from 1-5 and R_5 and R_6

25 which may be the same or different represent $\text{C}_1\text{-C}_5$ alkyl or
together form a heterocyclic ring with the N atom to which
they are attached, or wherein R_4 is a member selected from the
group consisting of imidazolyl, $-\text{O}-\text{C}_1\text{-C}_8$ alkyl, $-\text{O}-\text{benzyl}$,

-O-phenyl, and $\text{--}(\text{CH}_2)_n\text{N}^{\text{R}_5}\text{R}_6$, wherein n, R₅ and R₆ are defined

as above; with the proviso that R in both occurrences cannot represent H simultaneously; or the pharmaceutically acceptable acid addition or basic salts, C₁-C₄ alkylhalide quaternary salts or N-oxide thereof.

- 5 16. The method of claim 15, wherein said compound is:
3-Hydroxymethyldiphenylhydantoin.
- 10 17. The method of claim 15, wherein said compound is:
3-(N,N-Dimethylglycyloxymethyl)diphenylhydantoin.
- 15 18. The method of claim 15, wherein said compound is:
3-(N,N-Dimethylglycyloxymethyl)diphenylhydantoin
methanesulfonate.
- 20 19. The method of claim 15, wherein said compound is:
3-(N,N-Dimethylglycyloxymethyl)diphenylhydantoin
salicylate.
- 25 20. The method of claim 15, wherein said compound:
3-Glutarylloxymethyldiphenylhydantoin.
21. The method of claim 15, wherein said compound:
3-Succinylloxymethyldiphenylhydantoin.
22. The method of claim 15, wherein said compound is
administered in combination with a pharmaceutically acceptable
inert carrier.
23. The intermediate compound:



- 25 wherein R₁ represents a member selected from the group con-
sisting of H, C₁-C₇ straight or branched alkyl, CCl₃, CBr₃,
CI₃, , (CH₃)₂NCH₂-, -CHO, , ,
, , or ; wherein R₃ represents a

member selected from the group consisting of -OH, halogen,

$-OCH_3$, $-COOCH_3$, $-NO_2$ or $-OCOCH_3$; wherein X is $-O-$, $-S-$,

or $-N-$; and wherein R_2 represents a member selected from the group consisting of $-O-OH$ or $-O-R_4$, wherein R_4 is a member selected from the group consisting of $\text{C}_6\text{H}_4\text{R}_3$ wherein R_3 is defined as above, $\text{C}_6\text{H}_4\text{N}$, $\text{CH}_2\text{C}_6\text{H}_4\text{N}$, $\text{C}_6\text{H}_4\text{N} \rightarrow O$

the residue of any naturally occurring protein amino acid, the residue of any N- substituted amino acid, wherein said substituent is any amino acid protective group cleavable via hydrogenolysis or hydrolysis or the residue of an $N,N-C_1-C_5$ -dialkyl or C_4-C_7 cycloalkylamino acid, or wherein R_4 is a member selected from the group consisting of $-(CH_2)_nCOH$, $-CH_2OCH_2COH$, $-(CH_2)_nCOCH_3$, $-(CH_2)_n-C(=O)OC_2H_5$, or $-(CH_2)_n-C(=O)-N(R_5)R_6$, wherein n represents an integer of from 1-5 and R_5 and R_6 which may be the same or different represent C_1-C_5 alkyl or together form a heterocyclic ring with the N atom to which they are attached, or wherein R_4 is a member selected from the group consisting of imidazolyl, $-O-C_1-C_8$ alkyl, $-O$ -benzyl, $-O$ -phenyl, and $-O-(CH_2)_nN(R_5)R_6$, wherein n , R_5 and R_6 are defined as above.